

Assignment-2

HTML, CSS, DB2, Python & Flask

Assignment Date	13 October 2022
Student Name	Sudhagar M
Student Roll Number	727819TUIT138
Maximum Marks	2 Marks

Question-1:

1. Create User table with email, username, roll number, password.
2. Perform UPDATE,DELETE Queries with user table
3. Connect python code to db2.
4. Create a flask app with registration page, login page and welcome page. By default load the registration page once the user enters all the fields store the data in database and navigate to login page.
5. Authenticate user with username and password. If the user is valid show the welcome page

Solution:

Index.py

```
from flask import Flask, render_template, request, redirect,  
url_for, flash, session import sqlite3
```

```
app = Flask(__name__)
```

```
app = Flask(_name_)  
app.secret_key =  
"12345"
```

```
def init_db():  
    db = sqlite3.connect('Users.db')  
    with open('UserScheme.sql', 'r') as  
        schema:  
        db.executescript(UserScheme.re  
            ad())  
    db.commit()
```

```
@app.cli.command('in  
itdb') def  
initdb_cmd():  
    init_db()  
    print("Initialised database.")
```

```
def get_db():  
    conn =  
    sqlite3.connect('Users.db')  
    conn.row_factory =  
    sqlite3.Row return conn
```

```
@app.route(  
'/') def  
home():
```

```

return render_template('home.html')

@app.route('/
login') def
login():
    return render_template('signin.html')

@app.route('/
register') def
register():
    return render_template('signup.html')

@app.route('/signup', methods =
["POST", "GET"]) def signup():

    if request.method == "POST":
        Username =
        request.form["Username"]
        EmailId =
        request.form["EmailId"]
        Password =
        request.form["Password"] db =
        get_db()
        curr = db.cursor()
        curr.execute('INSERT INTO Users (Username, EmailId, Password) VALUES (?, ?, ?);',
(Username, EmailId, Password))
        db.commit()
        curr.close()
        db.close()
        return render_template('signin.html', title="signin",
succ="Registration Successful!") return
render_template('signup.html', title='Sign Up')

@app.route('/signin', methods =
["POST", "GET"]) def signin():
    error = None
    if request.method == "POST":
        Username =
        request.form["Username"]
        Password =
        request.form["Password"] db =
        get_db()
        Users = db.execute('SELECT Password FROM Users WHERE Username = ?', (Username,
)).fetchone()

        if Users is None:
            session['logged_in'] = False
            error = 'Incorrect
Username/Password.' elif
Password != Users['Password']:
            session['logged_in'] =
            False print(Users)
            error = 'Incorrect Password.'

        if error is None:
            session['logged_in'] =
            True return
            redirect(url_for('home'))
        flash(err

```

```
or)
db.close(
)
```

```
return render_template('signin.html', title='Sign In',
```

```
error=error) if __name__ == '__main__':
    app.run(debug = True)
```

UserScheme.sql

```
DROP TABLE IF EXISTS
Users;
CREATE TABLE Users (
    id INTEGER PRIMARY KEY AUTOINCREMENT,
    Username TEXT NOT
    NULL, EmailId
    VARCHAR NOT NULL,
    Password VARCHAR NOT NULL
);
```

```
INSERT INTO Users (Username, EmailId,
    Password) VALUES ( "KK",
    "KK2002@gmail.co
    m", "KK@123",
);
```

base.html

```
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta http-equiv="X-UA-Compatible" content="IE=edge">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>{% block title %}{% endblock %}</title>
    <link
href="https://cdn.jsdelivr.net/npm/bootstrap@5.1.0/dist/css/bootstrap.min.css"
rel="stylesheet" integrity="sha384-
KyZXEAg3QhqLMpG8r+8fhAXLRk2vvoC2f3B09zVXn8CA5QIVfZOJ3BCsw2P0p/We"
crossorigin="anonymous">
    <script src="https://cdn.jsdelivr.net/npm/bootstrap@5.1.0/dist/js/bootstrap.bundle.min.js"
integrity="sha384-
U1DAWAZnBHeqEIIVSCgzq+c9gqGAJn5c/t99JyeKa9xxaYpSvHU5awsuZVVFIhvj"
crossorigin="anonymous"></script>
    <script src="https://kit.fontawesome.com/78bf8e323a.js"
crossorigin="anonymous"></script>
    <!--<script type="text/javascript" src="{ { url_for('static', filename = 'js/proj.js') } }"></script>
    <link rel="icon" href="{ {url_for('static', filename = 'image/icon.png') } }" color
="#191919" sizes="any" type="image/png">-->
    <link rel="stylesheet" href="{ { url_for('static', filename = 'css/style.css') } }">
</head>
<body>
<div class="navigation">
    <!--<nav class="navbar navbar-expand-lg navbar-dark">
        <div class="container-fluid">
            <a class="navbar-brand" href="/" title="PaperBoat"><i class="fas
fa-ship"></i>PaperBoat</a>
            <ul class="navbar-nav" id="navcontent">
                <li class="nav-item">
                    <a class="nav-link" aria-current="page" href="/" title="Home Page"><i class="fas
fa-home" style="color: white;"></i>Home</a>
                </li>
```

```
<li class="nav-item">  
  <a class="nav-link" href="#" title="How to write an essay">About</a>  
</li>  
<li class="nav-item">
```

```

        <a class="nav-link" href="#" title="Essay Topics">Contact</a>
    </li>
    <li class="nav-item dropdown">
        <a class="nav-link dropdown-toggle" href="#" id="navbarDarkDropdownMenuLink"
role="button" data-bs-toggle="dropdown" aria-expanded="false">
            {% if session.logged_in %}
                welcome <i class="far fa-smile-wink"></i> !!
            {% else %}
                User
                settings
            {% endif %}
        </a>
        <ul class="dropdown-menu dropdown-menu-dark" aria-
labelledby="navbarDropdownMenuLink">
            {% if session.logged_in %}
                <li><a class="dropdown-item" href="/logout">Logout</a></li>
            {% else %}
                <li><a class="dropdown-item" href="/register">Register</a></li>
                <li><a class="dropdown-item" href="/login">Login</a></li>
            {% endif %}
        </ul>
    </li>
</ul>
</div>
</nav>--
>
<nav class="navbar navbar-expand-lg bg-dark">
    <div class="container-fluid">
        <a class="navbar-brand" href="/">PaperBoat</a>
        <button class="navbar-toggler" type="button" data-bs-toggle="collapse" data-bs-
target="#navbarNav" aria-controls="navbarNav" aria-expanded="false" aria-
label="Toggle navigation">
            <span class="navbar-toggler-icon"></span>
        </button>
        <div class="collapse navbar-collapse" id="navbarNav">
            <ul class="nav justify-content-end">
                <li class="nav-item">
                    <a class="nav-link active" aria-current="page" href="/">Home</a>
                </li>
                <li class="nav-item">
                    <a class="nav-link" href="#">About</a>
                </li>
                <li class="nav-item">
                    <a class="nav-link" href="#">Contact</a>
                </li>
                <li class="nav-item dropdown">
                    <a class="nav-link dropdown-toggle" href="#" id="navbarDarkDropdownMenuLink"
role="button" data-bs-toggle="dropdown" aria-expanded="false">
                        {% if session.logged_in %}
                            welcome <i class="far fa-smile-wink"></i> !!
                        {% else %}
                            User

```



```

        {% endif %}
    </a>
    <ul class="dropdown-menu dropdown-menu-dark" aria-
labelledby="navbarDropdownMenuLink">
        {% if session.logged_in %}
            <li><a class="dropdown-item" href="#">Logout</a></li>
        {% else %}
            <li><a class="dropdown-item" href="/register">Register</a></li>
            <li><a class="dropdown-item" href="/login">Login</a></li>
        {% endif %}

    </ul>
</li>
</ul>
</div>
</div>
</nav>
</div>
{% block content %}{% endblock %}
</body>
</html>

```

home.html

```

{% extends 'base.html' %}
{% block title %} Home {% endblock %}
{% block content %}
    <br><br>
    <div>
        <div>
            <h1>Welcome To PaperBoat.      !</h1>
            <p>&emsp;This website was created to do the follows. <br>
                &emsp;1.Create user table with email,
                username,password<br> &emsp;2.perform
                update, delete queries with usertable<br>
                &emsp;3.create a flask app with registration page, login page, welcome page. By
                default load the registration page once the user enters all the
                fields store the data in database and navigate to login page. Authenticate user
                with username and password. If the user is valid show the welcome page.
            </p>
        </div>
    </div>
{% endblock content %}

```

signin.html

```

{% extends 'base.html' %}
{% block title %} Login {% endblock %}
{% block content %}

    <div class="login-frame" id="id01">
        <form action="/signin" class="loginform" method="post">
            <h1>LOGIN</h1>

```

```

<div class="group">
  {% with messages = get_flashed_messages(with_categories=true) %}
  {% if messages %}
    {% for category,message in messages %}
      <p class="flash-msg alert alert-{{category}}" >{{message}}</p>
    {% endfor %}
  {% endif %}
{% endwith %}
  <input type="text" name = "Username" placeholder="Username" required>
</div>
<div class="group">
  <input type="password" name="Password" placeholder="Password" required>
</div>
<div class="group">
  <input type="submit" name="signin" id="signin" value="Login">
</div>
<div class="foot">
  <hr>
  <p>Don't have an account?<a href="/register"
  onclick="check(this.form)"><i>Signup</i></a></p>
</div>
</form>
</div>

{% endblock content %}

```

signup.html

```

{% extends 'base.html' %}
{% block title %} Signup {% endblock %}
{% block content %}

<div class="signup-frame" id="id02">
  <form action="/signup" class="signupform" method="post">
    <h1>SIGNUP</h1>
    <div class="group">
      {% with messages = get_flashed_messages(with_categories=true) %}
      {% if messages %}
        {% for category,message in messages %}
          <p class="flash-msg alert alert-{{category}}">{{message}}</p>
        {% endfor %}
      {% endif %}
    {% endwith %}
    <input type="text" name = "Username" placeholder="Username" required>
  </div>
  <div class="group">
    <input type="email" name = "EmailId" placeholder="Email Id" required>
  </div>
  <div class="group">
    <input type="password" name="Password" placeholder="Password" required>
  </div>

```

```

    <div class="group">
      <input type="submit" name="signup" id="signup" value="Signup">
    </div>
    <div class="foot">
      <hr>
      <p>Already have an account?<a href="/login"><i>Signin</i></a></p>
    </div>
  </form>
</div>

```

```
{% endblock content %}
```

style.css

```

body{
  /*background-color: rgb(54, 54, 54);*/
  background: linear-gradient(to right , rgb(92, 91, 91), rgb(0,0,0));
}
/*.....navbar.....*/
#navbar-brand{
  color: white;
  position:
  relative;
}
.navigation .navbar {
  background: linear-gradient(to right, rgb(92, 91, 91),
  rgb(0, 0, 0)) ; font-family: "Montserrat";
}
.navigation .navbar-
brand { text-
transform:
uppercase; letter-
spacing: .1em;
text-decoration:
underline; color: #fff;
position: relative;
}
.navbar-brand:hover, .navbar-
brand:focus { text-decoration:
none;
}
.navigation .navbar .nav-
item .nav-link { outline: none
!important;
font-size: 13px;
text-transform:
uppercase; letter-
spacing: .1em;
color: #fff;
text-decoration:
none; font-family:
"Montserrat";
}
.navigation .navbar .nav-item .nav-

```

```
link:hover, .nav-link:focus { text-decoration:
underline;
}
/*.....signin-form.....*/
```

```
.login-  
  frame{  
    margin:  
    0;  
    padding: 0;  
    font-family: sans-  
    serif; border:  
    none  
  }  
.loginform{  
  max-width:  
  500px;  
  margin: auto;  
  top: 50px;  
  width:  
  400px;  
  padding:  
  30px;  
  position: relative;  
  background:  
  #191919; text-  
  align: center;  
  transition: 0.25s;  
  border-radius:  
  20px;  
}  
.loginform input[type="text"],  
.loginform  
  input[type="password"] {  
    border: 0;  
    background:  
    none; display:  
    block; margin:  
    20px auto;  
    text-align:  
    center;  
    border: 2px solid  
    #3498db; padding:  
    10px 10px; width:  
    250px;  
    outline:  
    none;  
    color:  
    white;  
    border-radius:  
    24px; transition:  
    0.25s;  
    color: rgb(156, 156, 156);  
  }  
  
.loginform  
  h1 {  
    color:
```

```
    white;
    text-transform:
    uppercase; font-
    weight: 500
}
.loginform input[type="text"]:hover,
.loginform
    input[type="password"]:hover {
    width: 300px;
    border-color: #2ecc71
}

.loginform
    input[type="submit"] {
    border: 0;
    background: none;
```

```

display: block;
margin: 20px
auto; text-
align: center;
border: 2px solid
#2ecc71; padding:
14px 40px; outline:
none;
color: white;
border-radius:
24px; transition:
0.25s; cursor:
pointer
}

.loginform
input[type="submit"]:hover{
border: 2px solid #2ecc71;
background: linear-gradient(to right, #2ecc71, #1565c0);
}
.foot p, a{
color: rgb(156, 156, 156);
}
.foot hr{
color: rgb(92, 91, 91);
}
.flash-msg{
background-color:
#191919; border:
none;
}
/*-----signup-form---*/
.signup-
frame{ m
argin: 0;
padding: 0;
font-family: sans-
serif; margin-
bottom: 10px;
border: none
}
.signupform{ w
idth: 400px;
padding:
30px;
position:
relative;
max-width:
500px;
margin: auto;
top: 50px;
background:
#191919; text-

```

```
align: center;
transition: 0.25s;
margin-top: 20px;
border-radius:
20px;
}
.signupform input[type="text"],
.signupform input[type = "email"],
```



```
.signupform
  input[type="password"] {
    border: 0;
    background:
    none; display:
    block; margin:
    20px auto;
    text-align:
    center;
    border: 2px solid
    #3498db; padding:
    10px 10px; width:
    250px;
    outline:
    none;
    color:
    white;
    border-radius:
    24px; transition:
    0.25s;
    color: rgb(156, 156, 156);
  }
```

```
.signupform
  h1 { color:
    white;
    text-transform:
    uppercase; font-
    weight: 500
  }
.signupform input[type="text"]:hover,
.signupform input[type = "email"]:hover,
.signupform
  input[type="password"]:hover {
    width: 300px;
    border-color: #2ecc71
  }
```

```
.signupform
  input[type="submit"]{
    border: 0;
    background:
    none; display:
    block; margin:
    20px auto;
    text-align:
    center;
    border: 2px solid
    #2ecc71; padding:
    14px 40px; outline:
    none;
    color: white;
    border-radius:
    24px; transition:
```

```
    0.25s; cursor:
    pointer
}

.signupform
  input[type="submit"]:hover {
    border: 2px solid #2ecc71;
    background: linear-gradient(to right, #2ecc71, #1565c0);
  }
/*-----signout-form---*/
.signout-frame{
```

```
margin: 0;
padding: 0;
font-family: sans-
serif; margin-
bottom: 10px;
border: none
}
.signoutform{
width: 400px;
padding:
30px;
position:
relative;
max-width:
500px;
margin: auto;
top: 50px;
background:
#191919; text-
align: center;
transition: 0.25s;
margin-top: 20px;
border-radius:
20px;
}
.signoutform input[type="text"],
.signoutform input[type = "email"],
.signoutform
input[type="password"] {
border: 0;
background:
none; display:
block; margin:
20px auto;
text-align:
center;
border: 2px solid
#3498db; padding:
10px 10px; width:
250px;
outline:
none;
color:
white;
border-radius:
24px; transition:
0.25s;
color: rgb(156, 156, 156);
}

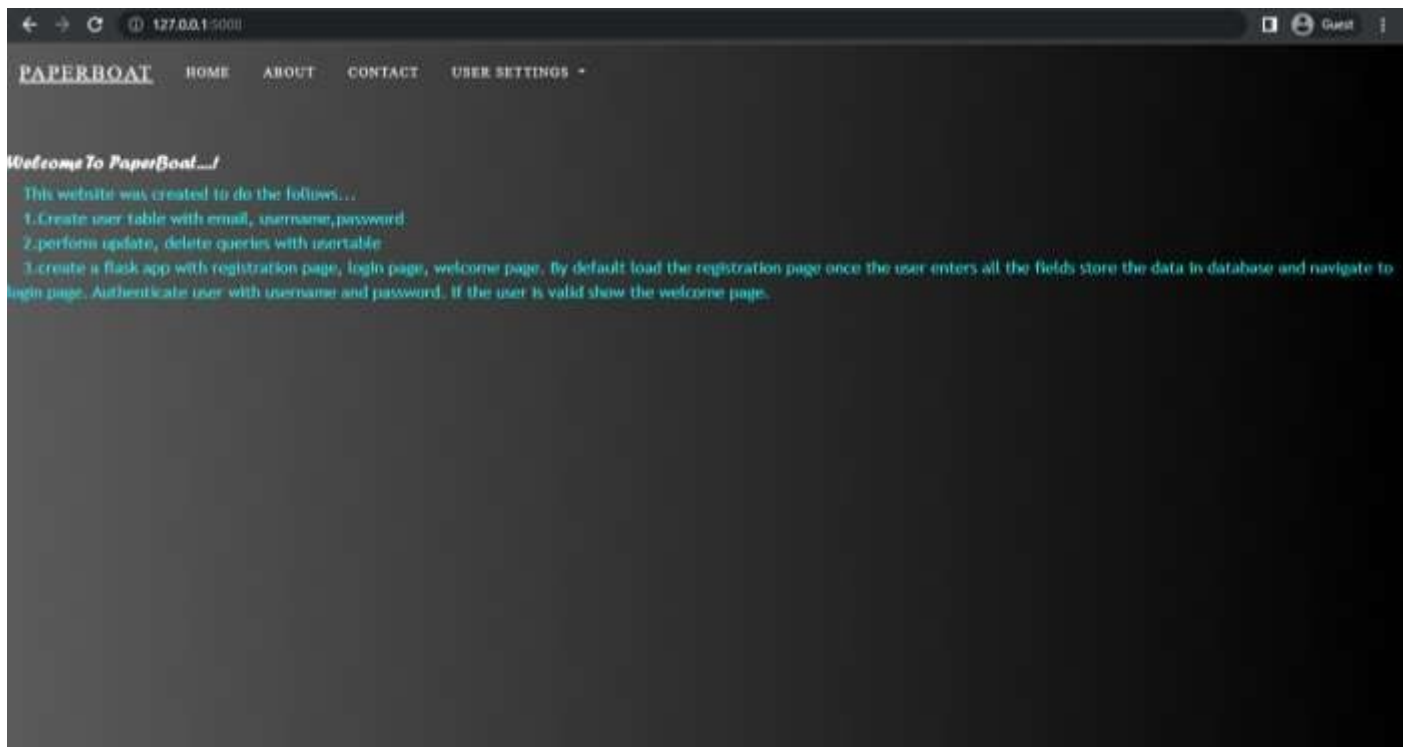
.signoutform
h1 { color:
white;
```

```
text-transform:
uppercase; font-
weight: 500
}
.signoutform input[type="text"]:hover,
.signoutform input[type = "email"]:hover,
.signoutform
input[type="password"]:hover {
width: 300px;
border-color: #2ecc71
}
```

```
.signoutform
  input[type="submit"]{
    border: 0;
    background:
    none; display:
    block; margin:
    20px auto;
    text-align:
    center;
    border: 2px solid
    #2ecc71; padding:
    14px 40px; outline:
    none;
    color: white;
    border-radius:
    24px; transition:
    0.25s; cursor:
    pointer
  }

.signoutform
  input[type="submit"]:hover {
    border: 2px solid #2ecc71;
    background: linear-gradient(to right, #2ecc71, #1565c0);
  }
/*_____Home_____*/
h1{
  color: #fff;
  font-family:
  Forte; font-
  size: larger;
}
p{
  color: aqua;
  font-family: 'Trebuchet MS', 'Lucida Sans Unicode', 'Lucida Grande', 'Lucida Sans', Arial, sans-
  serif;
}
```

Before login home page



Signup page:

The screenshot shows a web browser at the address 127.0.0.1:5000/register. The page has a dark theme with a navigation bar at the top containing the 'PAPERBOAT' logo and links for HOME, ABOUT, CONTACT, and USER SETTINGS. The main content area features a central 'SIGNUP' form with three input fields for Username, Email Id, and Password, each with a blue outline. Below these fields is a green 'Signup' button. At the bottom of the form, there is a link that says 'Already have an account?/login'.

Sign in page:

The screenshot shows a web browser at the address 127.0.0.1:5000/login. The page has a dark theme with a navigation bar at the top containing the 'PAPERBOAT' logo and links for HOME, ABOUT, CONTACT, and USER SETTINGS. The main content area features a central 'LOGIN' form with two input fields for Username and Password, each with a blue outline. Below these fields is a green 'Login' button. At the bottom of the form, there is a link that says 'Don't have an account?/signup'.

After login home page

The screenshot shows a web browser at the address 127.0.0.1:5000. The page has a dark theme with a navigation bar at the top containing the 'PAPERBOAT' logo and links for HOME, ABOUT, CONTACT, and WELCOME. The main content area features a central 'WELCOME' message that says 'Welcome To PaperBoat...!'. Below this message, there is a list of three items: 1. Create user table with email, username, password; 2. perform update, delete queries with usertable; 3. create a flask app with registration page, login page, welcome page. By default load the registration page once the user enters all the fields store the data in database and navigate to login page. Authenticate user with username and password. If the user is valid show the welcome page.